

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A power cable assembly for use in a water-cooled welding apparatus for conveying power from a welding machine to a welding torch and cooling water from the torch to a circulator reservoir, said cable assembly comprising:

a flexible electrical conductor formed of a plurality of twisted, braided or bunched wires;

a layer of flexible material substantially encasing said conductor so as to isolate said conductor from the cooling water and defining a plurality of projections extending radially therefrom; and

an outer flexible conduit disposed about said conductor and said encasing layer, said projections spacing said conduit from said conductor so as to define a and defining a plurality of unobstructed water-flow path paths extending therebetween and along said conduit so as to and surrounding uniformly surround said conductor for the effective dissipation of heat in said conductor.

2. (Currently Amended) The power cable assembly of claim 1, wherein said layer of flexible material is a plastic material so as to electrically insulate said conductor and has having a thickness within the range of about .008 - .015 inches for the effective dissipation of heat therethrough.

3. (Original) The power cable assembly of claim 1, wherein said radial projections are integrally formed with said layer of flexible material.

4. (Currently Amended) The power cable assembly of claim 3, wherein said layer of flexible material is a plastic material so as to electrically insulate said conductor and has having a thickness within the range of about .008 - .015 inches for the effective dissipation of heat therethrough.

5. Cancelled.

6. Cancelled.

7. Cancelled.

8. Cancelled.

9. (Currently Amended) A power cable assembly for use in a water-cooled welding apparatus for conveying power from a welding machine to a welding torch and cooling water from the torch to a circulatory reservoir, said cable assembly comprising:

an outer flexible conduit;

a flexible electrical conductor formed of a plurality of twisted, braided or bunched wires and disposed within said conduit;

a layer of flexible material substantially encasing said conductor so as to isolate said conductor from the cooling water whereby embrittlement of said wires is inhibited, said encasing layer having a thickness within the range of about .008-.015 inches so as to allow for the effective dissipation of heat therethrough;

a plurality of projections extending radially from said encasing layer for abutting said flexible conduit and spacing said conductor and said encasing layer from said flexible conduit, said projections defining so as to define a a plurality of unobstructed water flow path paths within said conduit extending therebetween and along said conduit and surrounding so as to uniformly surround said conductor for the effective dissipation of heat in said conductor to cooling water flowing through said water flow paths; and

a pair of end fittings for securing said power cable assembly between the welding torch and welding machine in fluid and electrical communication therewith.

10. (Original) The power cable assembly of claim 9, wherein said radial projections are integrally formed with said layer of flexible material encasing said conductor.

11. (Currently Amended) A power cable assembly for use in an air-cooled welding apparatus for conveying power and inert gas to a welding torch, said cable assembly comprising:

a flexible electrical conductor formed of a plurality of twisted, braided or bunched wires;

a layer of flexible material ~~substantially~~ encasing said conductor so as to electrically insulate said conductor and defining a plurality of projections extending radially therefrom; and

an outer flexible conduit disposed about said conductor and said encasing layer, said projections abutting said conduit so as to uniformly space spacing said conduit from said conductor so as to and define a plurality of unobstructed gas-flow path paths extending therebetween and extending along said conduit so as to uniformly surround and surrounding said conductor for the effective dissipation of heat in said conductor.

12. (Currently Amended) The power cable assembly of claim 11, wherein said layer of flexible material is a plastic material having a thickness within the range of about .008 - .015 inches for the effective dissipation of heat therethrough.

13. (Original) The power cable assembly of claim 11, wherein said radial projections are integrally formed with said layer of flexible material.

14. (Currently Amended) The power cable assembly of claim 13, wherein said layer of flexible material is a plastic material having a thickness within the range of about .008 - .015 inches for the effective dissipation of heat therethrough.

15. Cancelled.

16. Cancelled.

17. Cancelled.

18. Cancelled.

19. (Currently Amended) A power cable assembly for use in an air-cooled welding apparatus for conveying power and inert gas from a welding machine to a welding torch, said cable assembly comprising:

an outer flexible conduit;

a flexible electrical conductor formed of a plurality of twisted, braided or bunched wires and disposed within said conduit;

a layer of flexible material substantially encasing said conductor so as to electrically insulate said conductor, said encasing layer having a thickness within the range of about .008 - .015 inches for the effective transfer of heat therethrough;

a plurality of projections extending radially from said encasing layer and abutting said flexible conduit, spacing said conductor and said encasing layer from said flexible conduit so as to define a and defining a plurality of a gas flow path paths within said conduit extending therebetween and along said conduit and surrounding so as to uniformly surround said conductor for the effective dissipation of heat in said conductor; and

a pair of end fittings for securing said power cable assembly between the welding torch and welding machine in fluid and electrical communication therewith.

20. (Original) The power cable assembly of claim 19 wherein said radial projections are integrally formed with said layer of flexible material encasing said conductor.

21. Cancelled.

22. Cancelled.

23. Cancelled.

24. Cancelled.